Myotis sodalis (Miller and Allen)

Order: Chiroptera

Family: Vespertilionidae



Description: A medium-size myotis, closely resembling the little brown bat (Myotis lucifugus) but differing in coloration, the fur being a dull grayish chestnut rather than bronze, with the basal portion of the bairs of the back dull lead colored; coloration of underparts pinkish to cinnamon, hind feet smaller and more delicate than in M. lucifugus; calcar strongly keeled.

Distribution: Midwest and eastern United States from the western edge of Czark region in Oklahoma to central Vermont, to southern Wisconsin, and as far south as northern Florida. Distribution is associated with major cavernous limestone areas and areas just north of cave regions. (Hall, 1962).

Former Distribution: Probably about the same, although there is evidence that many caves within the range of the species have been abandoned since 1950.

Status: Endangered. Decreasing in numbers.

Estimated numbers: About 500,000.

Breeding rate in the wild: Usually a single young in late June.

Reasons for decline: Commercialization of caves in which Indiana bats roost. Wanton destruction of large numbers of Indiana bats by vandals. (John S. Hall reported in personal communication, 1965, that a few years ago two boys killed about 10,000 Myotis sodalis in Carter Cave, Kentucky, in just a few minutes.) Roosts being disturbed by increasing numbers of spelunkers and others seeking recreation. Disturbances during bat banding programs. Colonies frequently raided for laboratory experimental animals. Insecticide poisoning may possibly be new threat. The species has a fairly restricted geographic range and shows a high degree of aggregation in the winter, when over 90 per cent of the estimated population occurs in only four caves. This high degree of aggregation makes the species very vulnerable.

Protective measures already taken: American Society of Mammalogists appointed a committee in the fall of 1963 to investigate the problem of reduction in bat populations; resolution approved by American Society of Mammalogists on June 17, 1964, that removal of bats from caves be discouraged except for scientific research and that molestation of bats in roosts or other unnecessary disturbance be discontinued. Construction of a gate across entrance to Carter Cave, Kentucky, where over 100,000

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Myotis sodalis winter, to keep irresponsible persons from entering and destroying bats. Comprehensive study of life history and taxonomy taxonomy of the species published in 1962 by John S. Hall. Wynadotte Cave, a winter hibernating area, purchased by Indiana Department of Natural Resources. State laws prohibit taking of this species in several states.

Measures proposed: Educate public in regard to the interesting Life history and biology of bats. Publicize economically important role of bats in insect control. Acquisition of caves. Preventing access by public to caves in which colonies occur.

Numbers in captivity: None known

Breading potential in captivity: Unknown; probably no potential.